#### THE

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AND

## ANNALS OF EDUCATION.

### EDITED BY A. MORSE.

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#### MATHEMATICS.

Should our text-books upon this subject contain answers to their problems? As there is a difference of opinion upon this question, I desire to call the attention of teachers to a careful consideration of its importance. In our "Mental Arithmetics," the first book upon the subject placed in the hands of children, the answers to the examples are almost universally withheld; and the child is correctly taught, that the answer to the question, which is the object of his inquiry, is not to be seen before the reasoning is performed; that it is the legitimate and necessary result of his search; that it is the hidden truth, and must be sought for, to be found. If this is the true and philosophical mode of presenting the subject to the mind of the child, and if correct habits of mathematical investigation are thus formed, why not continue the same mode of mental search in the more advanced stages of the subject? Teachers, tell me why! Why should the answer be presented to the eye before the reasoning commences? Does it not divert the attention from the true mode of investigation, and suggest to the mind to combine numbers

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with a view of obtaining the answer, to the neglect of a careful study of the conditions involved in the question?

Warren Colburn, who may be justly regarded as the great benefactor of his age, with respect to the proper development of the mathematical powers, embracing the plan conceived by Pestalozzi, popularized it, and adapted it to the humblest capacity; and gave to the world, in his "First Lessons," what must be acknowledged as the "ne plus ultra" of primary arithmetics. Mr. Colburn followed his "First Lessons," with a more advanced work, called the "Sequel," and that by an elementary work upon Algebra; all without answers. I doubt very much, if the subject has, since his day, been presented in a more judicious and philosophic manner. Too much importance can not be attached to the early habit of independent thinking and self-reliance. Is it not a great mistake in mental culture, to assist the mind in performing that, which, unaided, it is able to achieve for itself? "The Creator has so constituted the human intellect, that it can grow only by its own action, and by its own action, it must certainly and necessarily grow."

When we present to a pupil a problem in arithmetic, it is for the mind's action; if with the question, we offer at the same time that assistance which aids the mind in doing what it ought to do by itself, we thereby prevent thoughtfulness and self-reliance, and defeat the primary purpose of education. I do most earnestly call the attention of teachers to this subject. I ask them if it is not true that " Keys," or answers to the problems, solutions and explanations contained in many of our text-books, are doing vast and ruinous injury, even counteracting the best directed energies of teachers, and preventing the most skillful from making thorough mathematical scholars? There is a very general complaint, that young men from our schools, on entering into business that requires but ordinary mathematical calculation, do not possess the power of using their knowledge upon this subject, even if they possess the knowledge itself. Why should it not be so? It is the legitimate consequence of a wrong course of training. The pupil followed his text-

book : the text-book gave him, first the rule, then the problem. then the answer. His habits having been thus formed, when now thrown upon his own resources, he finds to his surprise, that he has no available, practical knowledge of a subject that he has studied for years; he must now set himself to the work of learning what he should have acquired in the school-room. While this fact is before us, should we not inquire why it is so? We believe our text-books are in fault, and that the best teachers will find it difficult, if not impossible to counteract the bad habits formed in their use. One says " I see not the first reason why the answer should not accompany the problem;" another says, "if you do not furnish the answer the pupil will obtain its urreptitiously." Others still, contend that answers, explanations, and solutions even, are healthful stimuli to the pupil, that they are judicious encouragements without which, the subject would be unendurably irksome. They say these "Helps" are designed to assist and benefit the scholar, and with them the advancement is far more rapid. However honest these opinions may be, and whatever may have been the design in furnishing these aids,-if the results demonstrate that there is a great mistake in so doing, is it not our duty as teachers to fairly investigate this matter, and if we are in error, expose it and correct it?

We believe the great deficiency in mathematical calculation, so generally complained of by business men, in their clerks, who have been educated in our schools, is to be attributed, in no small degree, to habits naturally formed in the use of text-books containing answers to their problems, together with super-abundant explanations and solutions. The pupil thus relying upon his rule, combines numbers in such a way as to obtain a result corresponding to the answer given, and is satisfied. He has not investigated the conditions of his question, he understands not the principles involved in the solution, nor will the best mode of conducting a recitation correct the bad habits formed of obtaining a result, of having arrived at a conclusion unmindful of the reasoning. Take the other view of the subject; let no

answer be given to the problem, no "Key" to refer to, no solution to copy: let the pupil be taught to rely upon his own powers of investigation in the examination of the conditions of his problem, with the assurance that there is a truth involved, which by searching he can find out; and that by certain operations which the question itself, upon careful study, will suggest, the answer must come; then he may experience the joy of Archimedes of old, and cry out, "I have found it, I have found it." By this method of procedure, the pupil does his own thinking, and when he has obtained a result, he compares it with his question, to see if it is reasonable that such a conclusion should follow from the conditions of his problem, and thus forms the habit of relying upon his own judgment for the accuracy of his an-More and better than this even, he feels within himself increasing strength; a new power of investigation springs up in him, he feels that he can do to-day what he could not have done vesterday; a new interest is awakened, he feels that he is doing the work, he is bringing to light new truths; he now asks for the data only: away with your "Keys," answers and solutions! The pupil now begins to feel his power, can solve his question for himself, make his own "Key," and give you the result with a reason. He now has learned to depend upon himself; before he relied upon answers and explanations; he has now found that his strength increases just in proportion to his self-reliance.

It is said of the athlete, Milo of Crotona, that he began by lifting a calf, and by continuing to lift it daily, he gained strength as fast as the animal gained weight; so that he was able to lift it when it became an ox. So should we find it with our pupils, if we would teach them to think and act, not do their thinking and acting for them; a mental strength would be developed, an increased power of reasoning would be secured, self-reliance confirmed, and a permanent vigor of mind obtained, that never can be reached, so long as we continue the use of these collateral aids. "The greatest of all the warriors that went to the siege of Troy, had not the pre-eminence, because nature had given him strength, and he

carried the largest bow, but because self-discipline had taught him how to bend his bow." If mental growth and the acquisition of knowledge, with the power to apply it, are objects to be regarded by the teacher, then every true educator should be anxious to know by what means these results may best be secured. Do not "Keys," explanations and solutions freely used, defeat the great end for which mathematics as a disciplinary study is designed? Why is it that there is so great a demand for "Keys" and answers on the part of teachers? Is it that with these aids, the subject can best be presented to the pupil? Is it not rather for this reason, that in these days of labor-saving machinery, it is found easier and more expeditious to give the pupils the result of other men's thoughts, than teach them to think for themselves? May it not further be true, that notwithstanding all that our Normal schools, associations, conventions and institutes have done for the cause of education, there are still teachers in the field, who have so long used these "Helps," that they dare not now declare their own "Independence" of them? If we are conscious of having been in bondage to a wrong system, let us hasten to liberate ourselves, and then emancipate our pupils. Let us not be longer instrumental in perpetuating a false system of instruction.

A very large proportion of time in our schools is devoted to mathematical studies, and the result secured is by no means commensurate to the time and labor bestowed upon the subject. There is evidently a radical error somewhere. I have suggested where in my judgment it may possibly exist. If I have taken a wrong view of the matter, I call upon teachers to show me the error, and I will acknowledge it. If I am right, let us seek a change in our text-books, using those that are more suggestive and less explanatory, let us seek to make our pupils more self-reliant, make them independent thinkers, thus giving them a power which will increase with their growth, and serve them faithfully through life.

## "I KNOW IT WELL ENOUGH, BUT CAN'T TELL IT."

How often is this heard in the school-room; and are there not teachers even, who believe it true, and do they not sometimes, in the presence of parents or visitors, indorse the assertion by apologizing for the pupil? Be not deceived on this point. Is it true that a scholar knows a thing well enough, when he can not repeat or explain intelligibly to another? Is not here, one of the great errors in teaching? The child is allowed to leave a subject before mastering it, hence the entire thought, not having been fully grasped by the mind, is retained but for a moment, and vanishes, it can not be recalled, it is as though it were never known; worse even, for while the pupil experiences mortification and disappointment in finding himself deficient, and unable to tell what he says he knows, he is at the same time forming habits of mind which will be treacherous to him through life. It is a sad mistake to think you know a thing well enough, which you can not express or make known to another. You only half know it; and half knowing a thing is an injury rather than a benefit. This partial knowledge enables its possessor oftentimes, I know, to impose upon the community, to palm himself upon the credulous, and thus perpetuate the evil. That old Roman adage, "Beware of a man of one book," has much of practical wisdom in it. What good does a man's knowledge do him, if he can not use it? or what is a man profited by that kind of knowledge upon any subject which he can not make intelligible to another? Is the habit or power of communicating knowledge sufficiently regarded by teachers? Is not direct questioning too much practised, and the answer given, accepted as proof of the pupil's knowledge upon the subject? Is the teacher always aware, that in forming the question, the answer is frefrequently suggested, so that the pupil may respond with apparent intelligence, and at the same time, remain supremely ignorant of the subject? I think teachers, many times, in endeavoring to render a subject intelligible and interesting to

their pupils, talk too much themselves, and require too little of the scholar; and thus, it comes to pass that children "know a thing, but can't tell it." If it were true that they did know it, why might it not just as well have remained upon the hidden page, as be concealed in the recesses of their minds, they not having the power to communicate it? Are not parents as well as teachers somewhat in fault, for this state of things? Are they not too anxious, and in too much of a hurry for the promotion of their children from one class to another, from one grade of school to a higher, and do they not sometimes exert undue influence upon teachers in effecting this promotion? Thus again it happens, that pupils know a thing, but can't tell it, or rather the reasons here appear, why children do not know what they may claim or appear to know. Minds grow by fixed laws, just as much as does the vegetable or the tree. The soil, the climate and the cultivation have much to do with their growth and beauty, but the law of growth must be regarded, or death instead of progress is the result. Is it not a sad truth, that this taw of growth, is more strictly and carefully observed in the animal and vegetable world, than in the world of intellect and soul? has been said, and is now said upon the subject of thoroughness in teaching: but alas! how difficult a thing to secure it. What! you exclaim, with all our facilities and modern improvements, difficult to make thorough scholars? Yea, verily!

Young America can not stop to be thorough. He must "go it," and it is dangerous to check or restrain the ambitious youth of modern times. Thus, with a popular rush, we must go ahead too fast to be thorough; and more than that, the superficial and the showy are at a premium, not ostensibly, and intentionally perhaps, but in reality it is so. The popularity of a teacher depends in no small degree upon the pleasantness of his school; study is not pleasant to all children; they do not love it; they hate it; hence, if they are compelled to learn lessons, and actually to make improvement against their inclinations; they are not pleased, they find fault, they complain, and parents oftentimes listen to these complaints, thereby opposing the teacher, while he is

pursuing the only possible course for securing thoroughness in his pupils, making them, even against their wishes, thinking, self-reliant scholars.

There are children, it is true, in every school, who love study and will be thorough in everything they do, with or without the teacher's assistance: these understand, and can always tell what they know; they take pleasure in looking into the reason of things, and finding out why it is thus or so. These are the exceptions, and are not numerous. If they are placed in the front rank, as representatives of thorough teaching, and others are allowed to share in the credit awarded to the really deserving, by being retained in the same class, a part of the same school, who will go behind the scene, or expose the true condition of things? If things go smoothly at school, and if pupils are promoted to their satisfaction, parents are too ready to accept superficial attainments for · thoroughness, they do not find out the difference until it is too late. Most children are delighted with entertainments, and it is often found much easier to amuse than to instruct, and if a wide-spread fame may be secured, by rendering a school so pleasant, that pupils leap for joy at the sound of the school-bell, is it strange that teachers, being fallible, should sometimes yield to the popular demand, and be found pursuing that course which charms the children, gratifies the parent and brings glory to themselves? True thoroughness throughout an entire school, is an excellence so rare as seldom to be found. It costs so much, and is obtained at so great an expense of labor and patience, and oftentimes attended with so great a risk; how many are the teachers, who dare undertake to secure it? Who will say, these my best pupils will do well with little attention; I will bestow my main energies and best skill upon my dullest and most indolent pupils? Who says it shall be my chief object to make thorough scholars of those who have the least ambition, to bring forward to a respectable rank those who are entirely indifferent? Is not this the only way to secure the end, to take the most pains, bestow the most labor, work the hardest for those who are the least willing to work for themselves?

If we, as teachers, were willing to pursue this course, to labor with greatest diligence for the most obtuse of our pupils, and leave time to testify to our skill and fidelity as educators, we should ere long find, that the class of pupils who "know a thing well enough but can't tell it," would soon become surprisingly less, and armies of men and women would be found occupying high and responsible stations in life, who would be ready to testify that their success was to be attributed to the fidelity of teachers, at a time when they little appreciated the labor which was bestowed upon them. Though the reputation of such teachers might not be secured at an early day, it would be as lasting as time, and the consciousness of fidelity a rich reward.

# Resident Editor's Department.

#### SEEING AND HEARING.

It has been a fault in our schools that pupils have not been taught to see and hear. Hence, we have hundreds of men who "having eyes see not, and having ears hear not." They live and move in the midst of the most beautiful scenery and surrounded by the wonders of nature, and yet if they see at all, it is as "through a glass darkly!" They discern no beauties in the works of creation, and the most enchanting land-scape is to them simply a collection of pasture, woodland, field and meadow, attractive only as a source of profit. They see no God in nature, nothing to awaken devotional feelings, nothing to excite admiration. The lofty mountain and the flowing river are often regarded as mere obstacles to man's progress,—or as the means of contributing to his material resources. Every object is viewed only with a dollarish eye and every flower is snuffed for its copperish scent.

How different is it with the man who has been trained

to see and who in beholding the works of Nature, is led to adore as he looks "through Nature up to Nature's God." To such an one, every mountain, hill and valley, every forest and river is radiant with the smiles of Infinite goodness and wisdom. The babbling brook no less than the majestic river and the mighty cataract proclaim the power of the hand that made them. The springing grass, the waving grain, the stately forest and the opening flower, alike speak of the goodness and omnipotence of God. If he looks upward and beholds the "glittering stars that gem the sky, he is ready to exclaim:

"Forever singing as they shine, The hand that made them is divine."

The man of untrained ear hears no sounds except those of a discordant or utilitarian nature,—while for him who has been taught to hear aright, the world is full of music and sweet sounds. All animated nature is ever chanting in soul-stirring notes the worlderful goodness and wisdom of Him at whose command they sprang into existence.

We may find in every community, men who have ears and eyes, and those who are virtually destitute of both. The former revel in beautiful scenery, listening to nature's sweet and varied music, while the latter grope their way as in darkness,—hearing no harmonious sounds; the former are happy, ever breathing and diffusing a spirit of cheerfulness, the latter sad and censorious,—ever complaining of the present and casting a gloomy horoscope of the future. We have all seen men of the latter class, and know what a chilling and depressing influence their mere presence imparts.

A man with trained eyes and ears, a man of refined tastes and cultivated judgment is a prize to any community. Happy influences emanate from him and his spirit of cheerfulness ever makes him a welcome companion, a cherished neighbor. We know of a man, whose correct taste and well-trained eye have done much towards beautifying the village in which he resides,—all unconsciously on his part, and, to a great extent, on the part of others. It is the result of his silent

but correct example, by which many have been led to decorate their grounds and to cultivate flowers and shrubbery. Many such men there are in the land, and their worth is inestimable. We hope their number is increasing from year to That such may be the case, we would urge upon teachers the importance of training their pupils to observe and to hear. This may be done in many ways and on various occasions. Let them frequently be called upon to give an account of objects of interest that may have attracted their attention on the way to or from the school-room. If they take a holiday walk, let that be made the subject of familiar conversation, with a view to learn what was seen and heard. If a journey has been made by a pupil, take special pains to interrogate him as to what of interest he saw, and thus by your own spirit of inquiry you will awaken in him a desire to afford you gratification, and make him ever watchful to note objects of interest and to catch the sounds of sweet music. In fine, it should be the constant aim and wish of the teacher to train his pupils to move about with open eyes and listening ears; and also so to cultivate the senses of vision and hearing, that only beautiful scenes shall be treasured up,-only sweet and harmonious sounds remembered. Then may we hope to meet with more men who possess a genial nature and in whom the true spirit of observation and investigation is properly developed. "Teach a child to see properly and to hear properly, and you have prepared him to receive instruction on any point."

For the Common School Journal.

#### LITTLE THINGS.

OFTEN, very often, do we find men prone to overlook life's little duties, in their intense desire to achieve something mighty or daring, which they imagine will shed a halo of glory around their names. Present duties are unperformed, present beauties unnoticed, and present joys unfelt, by those ardent worshippers of great deeds. They have some darling

project hung up in the gallery of their imagination, whose brightness far outshines all others. If this could be attained by one mighty stroke, by one intense effort of all their powers and faculties, it would be done at once; but they have not the patience to advance slowly, step by step, adding "here a little and there a little," or to perform those thousand everyday duties, trivial in themselves, but whose aggregate is the chief ingredient in all true greatness.

There are persons of this character in every profession; there are teachers of this stamp,-those well-meaning, but mistaken souls who are forever hunting after some "royal road" through which to conduct their pupils to the temples of Religion, Science and Virtue; but while so doing lose many a golden opportunity of winning them along the only

true path that leads to these glorious structures.

Life is made up of little things. It is not often the daring exploits of a day, but the performance or neglect of those oft-recurring, every-day duties which pertain to our vocation, that will decide our character and usefulness. As we discharge or omit these, so shall we render our lives a blessing The earnest and faithful teacher can not but feel a deep responsibility resting on him, in reference to what might be called the "little things" of his profession. The child's progress must of necessity be gradual. And during . this progress, there will arise many an unlooked-for influence which may seem to us scarcely worthy of notice, but which will have a powerful bearing on that child's future. If, then, we would have our pupils finished scholars, if we would have them become noble men and women, possessed of pure and truthful hearts, we can not be too watchful to improve these little opportunities for exerting a right influence over their minds to-day.

Suppose that a magnificent temple was to be erected, as a monument of art. How carefully and skillfully would the architect form his plan and execute his work. He would not build an unsightly pile, possessed of strength and solidity, but destitute of all grace and symmetry; nor, what would be worse still, would he rear a painted and gilded skeleton, liable at any moment to fall; but he would strive to combine strength with beauty, solidity with grandeur. He would not deem the minor points unworthy of attention, but would aim to mould each minute portion with grace and firmness, until every rising spire and gleaming turret, and fretted arch were so fashioned as to form a perfect whole.

Fellow-teachers! we are aiding in rearing characters,—characters that shall live long after earth's temples have faded away. Do we labor as we should? Do we strive, prayerfully and earnestly, to mould every minute portion of these immortal structures so that there shall be "nothing wanting,"—no lack of strength or finish? Do we by "patient continuance in well-doing," seek to embrace every offered opportunity, however trivial it may seem, of imparting good to those entrusted to our care? Are our lives "living epistles" of purity and truth, seen and read of our pupils?

The influence of little things on our lives is often very great:

"A pebble in the streamlets scant
Has turned the course of many a river;
A dew-drop on our infant plant
Has warped the giant oak forever."

So, too, sometimes, have very trivial things turned the whole course of a child's future life. Often is the scale of the young mind's destiny very evenly balanced, and it requires but a slight force to turn it either way. A word, a look, a tone of the voice reaching the mind at such a time may never be forgotten. I know that it is quite agreeable sometimes to pass over "little things,"-by which term we usually mean those duties we know we ought to do, but don't want to,—and to fancy that our responsibility, after all, is not much. But I do not believe that the truth will sustain us in such views. I believe that a teacher's influence and responsibility are often far greater than we are wont to think. The results may not come at once, but sometimes they will come, and tell largely on that child's weal or wo. Inasmuch, then, as we are working on immortal minds, working where our influence will be felt forever, we ought to be most watchful to improve

all the *little things* that will aid us in the glorious work, praying our Heavenly Father that we may sometimes return from the harvest bearing with us precious sheaves.

An anecdote has been recently published, which illustrates very vividly the serious results flowing from neglected little things. Some workmen were engaged in building a tower of brick. The architect insisted on having each brick laid with the nicest exactness, particularly the first courses which would support the others. But, owing to some cause, at one corner a single brick was placed slightly out of line. The mistake was unnoticed, and the work went on. Each course being laid in the same line, the tower was not exactly straight, and the danger became more imminent the higher it proceeded. After reaching the height of fifty feet, it fell with a tremendous crash, burying the workmen in the ruins,—and all because one single brick was laid wrong at the commencement.

What a vivid picture is this of life! How often does one bad habit or one false principle imbibed in youth, when the character is forming, prove the ruin of the man in after life. Then let us strive, brothers and sisters in a glorious calling, to mould aright the foundations of our pupils' characters; let us look to the little things, so as not to involve in wreck and ruin the immortal mind, whose worth transcends that of earth's proudest temples. Although we may not at first see the results of our labors, yet it is true of the teacher—

"That the seeds of truth he leaves On the seeming barren ground, Shall in future years be bound Into golden harvest sheaves."

For the Common School Journal.

#### A STORY FOR YOUTH.

BY S. J. WHITON.

"THOU GOD SEEST ME."

Angry voices rang out on the still, sharp air of a winter's morning. Childhood's lips quivered with rage, and young hearts were throbbing in tumultuous passion.

A group of boys and girls had gathered round the schoolroom door, but the teacher had not arrived, for it was still
early. In their midst stood two of their school-mates, John
Wilson and Henry Farnham, with compressed lips, flushed
faces and flashing eyes. A difficulty had arisen between
them that morning, at first simply as to which of their sleds
was the swiftest coaster; but added words had increased the
violence of the dispute, until this small beginning threatened
a most serious result. There they stood, burning with intense excitement, and each thinking himself a hero, as an
angry person alway does.

"Hurrah, boys! see this coward, how he trembles!" cried John in a scornful tone.

"Oh! how smart you do feel!" said Henry in a mocking manner. "I suppose you'll be king one of these days."

"I tell you you're a dunce, and I won't be talked to by you."

" You will!"

"I won't!" and a blow descended on Henry's face.

Pale as a sheet, with a livid spot burning in each cheek, Henry's clenched hands were drawn back for avenging blows.

"THOU GOD SEEST ME."

Clearly but mournfully, this sentence sounded in every ear. A breathless silence pervaded the group. The uplifted hands were stayed. The angry boys shrank back before a hitherto unfelt awe. Every eye was turned in the direction of the voice, only to meet the sorrowing face of their teacher, whose heart was filled with grief for this exhibition of youthful passion.

There were no gay laughs, no buoyant greetings, nor gleetul smiles on that morning; but silently and sadly the pupils took their accustomed seats. Each young heart seemed conscious of the presence of an unseen eye, that was reading its inmost thoughts. Each one felt that a great sin had been committed, and its gloom hung over the whole school-room.

A few beautiful and appropriate passages from God's holy book were read, showing the fearful consequences of a life of anger and of sin, and the peaceful rest that remains to the servants of the living God; and then a heartfelt supplication was offered to our Heavenly Father, that all, and especially those whose hearts had just been filled with rage, might be led to see their sin and submit themselves to a Saviour's love. Many a young heart joined in this fervent prayer, and many an eye unused to weep at such a time was filled with tears.

After the devotions were ended, the teacher kindly but earnestly pointed out the sinful nature of evil passions, and the dreadful results that flow from an indulgence in them, and urged all, when tempted to give way to anger or any other fault, to think, "Thou God seest me." She strove to induce them to ask God for the forgiveness of their sins, and to pray that He would lead them "through the green pastures, and beside the still waters" of His love. And she labored not in vain. A holy hush rested on those young hearts. The "still, small voice" spoke to their souls, and urged them to put their trust in God. And they hearkened, submitted, and were blessed; and many a one yet lives to thank that teacher for her faithfulness.

Years have passed since that winter's morning, and yet its influence is still felt,—yea, and will be felt through all the endless ages of eternity. John Wilson and Henry Farnham still live,—the one a devoted missionary to the heathen in the wilds of Africa, the other a faithful laborer in the "vineyard of the Lord" among our own favored people. They both attribute their success and their usefulness to the influences

thrown around them on that cold winter's day in the little country school-house, by an earnest and Christian teacher. Ever after, when tempted, they would think, "Thou God seest me." They gave their hearts to God. And may you, my dear young friends, "Go and do likewise."

WESTFORD, Conn., Feb. 15th, 1860.

#### THE PROPOSITION.

Ir may startle you to hear that the highest function of the mind is nothing higher than comparison, but in the end I am confident of convincing you of the paradox.—Sir Wm. Hamilton, Lect. xx.

The mind having received various ideas or notions through the media of consciousness and perception, is not content with the mere possession, but by the aid of the reasoning, er discursive faculty, is constantly endeavoring to discern their various relations, and thus to arrive at new truth. The sole operation of this reasoning faculty is comparison. clusion arrived at is a judgment. Every judgment affirms or denies, and constitutes a complete thought. When expressed in language it is called a proposition. Thus, I judge iron to be heavy, gold not to be food, and express these judgments by the propositions; iron is heavy, gold is not food, iron which I affirm weight of and deny nutriment of gold. Every proposition consists of three parts; the subject, that of which something is affirmed or denied; the predicate, that which is affirmed or denied of the subject; and the copula, which connects the subject and predicate, and expresses the affirmation or denial. The subject and predicate express ideas. the copula expresses a relation.

The predicate and copula may be united in one word, which is always a verb. Thus, dogs run, is nearly equivalent to dogs are running.

If either part be taken away there remains no longer a complete proposition. Hence, the proposition must be con-

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sidered as a unit, complex indeed, but a unit still. When we analyze a sentence we may reduce it to propositions. Beyond this we deal with ideas either complex or simple, but not with thoughts. Both subject and predicate may be modified by means of words, phrases, or dependent propositions, expressing some subordinate idea or thought, but all expressed by the predicate, is affirmed or denied of all expressed subjects. Thus, "Water freezes when the weather is sufficiently cold." The predication here is not simply "freezes," but "freezes when the weather is sufficiently cold." The subject being unlimited, it is affirmed that all water will freeze under the circumstances expressed by the predicate.

Our opinion has long prevailed that every word (except connectives,) must be parsed separately and as in syntactional connection, with only one other word. In those cases in which two or more words are used to express one idea, it is not easy to see how this is to be done. In fact, parsing on the old plan is often no more an analysis of the sentence than chopping cord wood is an analysis of the tree. Words depend upon ideas for their form and relation, and must be parsed accordingly.

### POVERTY NOT SO GREAT A CURSE.

Ir there is anything in the world that a young man should be more grateful for than another, it is the poverty which necessitates his starting in life under very great disadvantages. Poverty is one of the best tests of human quality in existence. A triumph over it is like graduating with honor from West Point. It demonstrates stuff and stamina. It is a certificate of labor faithfully performed. A young man who can not stand this test is not good for anything. He can never rise above a drudge or a pauper. A young man who can not feel his will harden as the yoke of poverty presses upon him, and his pluck rise with every difficulty that poverty throws in his way, may as well retire into some corner and hide himself. Poverty saves thousands more than it ruins, for it

JIV Joy

only rains those who are not particularly worth saving, while it saves multitudes of those whom wealth would have rained. If any young man who reads this letter is so unfortunate as to be rich, I give him my pity. I pity you, my rich young friend, because you are in danger. You lack one great stimulus to effort and excellence, which your poor companion possesses. You will be very apt, if you have a soft spot in your head, to think yourself above him, and that sort of thing makes you mean, and injures you. With full pockets and full stomach, and good linen and broadcloth on your back, your heart and soul plethoric, in the race of life you will find yourself surpassed by all the poor boys around you before you know it.

No, my boy! if you are poor, thank God and take courage, for He intends to give you a chance to make something of yourself. If you had plenty of money, ten chances to one it would spoil you for all useful purposes. Do you lack education? Have you been cut short in the text-books? Remember that education, like some other things, does not consist in the multitude of things a man possesses. What can you do? That is the question that settles the business for you. Do you know men, and how to deal with them? Has your mind. by any means whatever, received that discipline which gives to its action power and facility? If so, then you are more a man, and a thousand times better educated than the fellow who graduates from a college with his brains full of stuff that he can not apply to the practical business of life-stuff, the acquisition of which has been in no sense a disciplinary process, so far as he is concerned. There are few men in this world, less than thirty years of age, and unmarried, who can afford to be rich. One of the greatest benefits to be reaped from great financial disasters, is the saving of a large crop of young men .- Timothy Titcomb.

#### YOUNG LADIES.

What a number of idle, useless young women—they call themselves young ladies-parade our streets! "They toil not, neither do they spin; yet Solomon in all his glory was not arrayed like one of them." Do they ever look forward to the time when the real cares and responsibilities of life shall cluster around them? Have they made, or are they making, any preparation for the onerous duties which will surely fall to their lot-duties to society, the world, and They lounge or sleep away their time in the morning. They never take hold of the drudgery, the repulsive toil, which each son and daughter of Adam should perform in this world. They know nothing of domestic duties. They have no habits of industry, no taste for the useful, no skill in any really useful art. They are in the streets, not in the performance of their duty, or for the acquisition of health, but to see and be seen. They expect thus to pick up a husband who will promise to be as indulgent as their parents have been, and support them in idleness. They who sow the wind in this way are sure to reap the whirlwind. No life can be exempt from cares. How mistaken an education do these girls receive, who imagine that life is always to be a garden of roses! Labor is the great law of our being. How worthless will she prove who is unable to perform it!

It has been observed that "by far the greatest amount of happiness in civilized life is found in the domestic relations, and most of these depend on the home habits of the wife and mother." What a mistake is then made by our young girls and their parents when domestic education is unattended to! Our daughters should be taught, practically, to bake, to cook, to arrange the table, to wash and iron, to sweep, and to do everything that pertains to the order and comfort of the household. Domestics may be necessary, but they are always a necessary evil, and the best "help" a woman can have is herself. If her husband is ever so rich, the time may come when skill in domestic employments will secure to her

a comfort which no domestic can procure. Even if she is never called to labor for herself, she should, at least, know how things ought to be done, so that she can not be cheated by her servants.

Domestic education can not be acquired in the streets. It can not be learned amidst; the frivolities of modern society. A good, and worthy, and; comfort-bringing husband can rarely be picked up on the pavement.

The highest and best interests of society in the future, demand a better, more useful, a more domestic training of our young ladies.—Hartford Courant.

#### HINTS TO TEACHERS ON READING.

BY M. T. BROWN.

To those teachers who suppose Reading to be a gift of Nature, or an accidental acquirement of practice, all statements of the principles upon which the Elocutionist founds his rules, must seem clearly unnecessary. Such teachers are continually drifting into the region of indifference. They become actually your educational fatalists. They soon come to think and say "Whatever is to be, will be! It is the gift of Nature to read expressly, it comes to the favored few, it is the result of no instruction, so I will not interfere with such admirable economy!"

Such persons, holding such unfortunate opinions, only perpetuate the "let alone" systems of instruction. They are serviceable and valuable only by way of contrast and illustration. Their light is darkness, the more fatal and sad since they perceive it not!

To those teachers, then, who are unwilling to examine the principles of elocution, and to apply them practically, in every-day instruction, it is unnecessary to urge the importance of a thorough and exact teaching of the elements of expressive speech. To this class we must be allowed to apply their cardinal principle and to let them alone severely!

In a previous article upon Reading, the teacher was urged to require the pupil to,

1. Analyze and give expression to the thought.

2. Analyze and give expression to the feeling, sentiment or passion.

3. Give heed to the mechanical execution, pronunciation and enunciation.

As an aid to the first of these requirements, a grammatical analysis of each sentence in the lesson should be required of each pupil. It matters not what system of analysis is followed, so that the pupil is taught to find the thought, which the sentence expresses, and to see the force of the emphatic words. It is usually sufficient that he can readily name the subject, predicate and show the force of the modifiers of these principal elements. In an advanced class such an exercise should precede every reading lesson, and the teacher should call attention to the words which add force or expression to the thought.

In a primary class, the teacher must, by a series of questions, illustrate the thought, must, in other words, take the thought out of its verbal husk, so that the little ones shall apprehend it. Remember! no person, child or adult, can read appropriately what he does not clearly understand. An analysis of the thought must and does precede every correct utterance, and we find the more condensed the thought the more difficult the expression. Thus Shakespeare becomes the most difficult of all reading, so condensed is his verse. Primary reading books should expand the thought, and the teacher must still further illustrate it if the pupil does not apprehend it.

We have no where found a better illustration of a method of questioning a primary class, too young to use the technical terms of grammatical analysis, than is given in a recent volume, entitled "The Teacher's Assistant." We quote from it an article upon Reading, an extract from one of H.

W. Beecher's sermons, entitled

Published by Crosby, Nichols & Co., Boston.

#### THE WRECK OF THE ARCTIC.

"It was Autumn. Hundreds had wended their way from pilgrimages; Rome and its treasures of dead art, and its glory of living nature; from the side of the Switzer's mountains, from the capitals of the various nations; all of them saying in their hearts, 'We will wait for the September gales to have done with their equinoctial fury, and then we will embark; we will slide across the appeased ocean, and, in the gorgeous month of October, we will greet our longed for native land and our heart-loved homes!"

The author says, truly, "how much of interest and profit may be obtained, from the above extract, by asking the following and other questions which readily suggest themselves:"

"What do you know of the author of this piece? What was the Arctic? Where was she? Whither was she bound? What is the meaning of "wended?" of "pilgrimage?" Where is Rome? What is meant by "the treasures of dead art?" Where does the Switzer live? What are his mountains called? What is meant by "September gales?" by "equinoctial?" What is meant by "we will slide over the ocean?" Meaning of "appeased?" What is meant by the "appeased ocean?" Meaning of "gorgeous?" Why is October called a gorgeous month? Can you give some other sentence containing the word gorgeous?"

A class thus taught to apprehend the thought of the discourse, can hardly fail to begin to give true expression. It must not be forgotten by primary teachers that the Reading is at first imitative. In children the perceptive faculties are far more active than the reflective. Hence, they need the living object or illustration before them. Their attention tires of abstractions. See how readily they will talk with you about the butterfly or the bee that has chanced to fly into the room!

In no branch of study will such irremediable mischief be done, to the little ones, as in reading, if the teacher illusstrates with a listless, careless, emotionless manner, with poor quality of voice or with dead tones.

Childhood is the era of imitation. So true is this that you will find the prominent peculiarities of the village teacher,

lawyer or preacher, reproduced in exact form and feature, by the ambitious declaimer in the Public School.

Let us now consider the second requirement of good reading, namely, "To analyze and give expression to the feeling, sentiment or passion of the discourse."

This is a branch of Reading almost entirely neglected in school instruction. Most teachers seem to have adopted the theoly of Talleyrand, that "speech was given us to conceal our thoughts," and most happily do they illustrate the satire of the witty philosopher, by reading emotional or passionate language with a leaden monotony, or a passionless, hum-drum utterance, or a noisy clamor and vociferation, calling to mind Hamlet's satire upon the Actors, who, "Having neither the accents of Christians, nor the gait of Christian, Pagan or man, have so strutted and bellowed that I thought some of nature's journeymen had made men and not made them well, they imitate humanity so abominably!"

What! (say some such teachers) "do you mean to say that the pupil should be taught to study the *emotion* of the piece, as he would study the thoughts? If a selection, where the emotion is one of grief, to attempt so to feel the sentiment as to express it with proper quality, tone and emphasis? That he should make this study of *emotion* a part of his preparation for his reading lesson?

We mean just this, and moreover believe, that by the laws implanted in our natures, and as universal as are human sympathies, hopes and fears, certain qualities and tones of the human voice are universal modes of expression, and that it is as grave an offence to read without proper emotional expression as to read without comprehending the thought.

Is it not true that certain tones of voice are universally recognized as expressive of certain emotions? If so, is there not essential propriety in teaching the pupils to use these marvellous keys of universal expression?

Take, for example, the truth, stated by Dr. Rush, that certain degrees of force and pitch are universally associated with certain states or mind. Now let us recall any examples of true and natural expression, and consider if the method, our method, if you please, be not a universal one:

Thus, Hate, Ferocity, Revenge, declare themselves with force, ever enlarge and swell the throat, and deepen and intensify the quality of voice.

Secrecy muffles the voice against discovery, and uses the whisper, employing little force.

Doubt cunningly employs an undertone, using the half whisper.

Courage uses the oratund quality—a bold, open, free, forcible utterance, like the call of a trumpet.

All sentiments unbecoming or disgraceful, smother the voice to its softer degrees, in the desire to conceal their utterance. But it is unnecessary to multiply examples. Can a teacher pretend to teach reading, who gives no heed to this important branch of the subject?

"How does it happen," said an eminent divine to a popular tragedian, that I, who deal with the most solemn truths, the soul's destiny, the hereafter, can not move the strong hearts of my hearers, while you, who deal in mere fictions, the creations of man's genius or fancy, 'can drown the stage in tears?"

Ah! said the man of the buskin, "I speak of fictions as though they were realities, while you speak of realities as though they were fictions!"

In conclusion, need we ask the teacher attentively to consider the question, "How shall I teach Reading?"

Ohio Ed. Monthly.

## LOCAL AND PERSONAL.

NEW JERSEY. We learn with pleasure that the present prospect of educational matters in this State is highly encouraging. The State Normal School at Trenton, is in a very flourishing condition, having one hundred and forty pupils, and the Principal, W F. Phelps, Esq., has done much to infuse a spirit of enthusiasm and vigor in all parts of the State. Against obstacles that would have discouraged most men, Mr. Phelps has moved on to complete success. His own Normal training was received under the late DAVID P. PAGE, a man who never failed of accomplishing what he

undertook, and all who were favored with his instruction and influence, partake largely of his spirit.

CHICAGO. Our thanks are due to our friend, William H. Wells, Esq., and also to Luther Haven, Esq., for copies of the sixth annual Report of the Board of Education. It is a sensible and able document, but we have not space for extracts in this number. The schools of Chicago are under an efficient supervision, and maintain a high rank. Superintendent Wells is earnestly devoted to his work.

WISCONSIN. Chancellor Barnard is doing efficient work in this State. From the Wisconsin Journal of Education we learn that he has made arrangements for holding eighteen Teachers' Institutes in March, April and May. We wish him all the success his efforts so richly merit.

MASSACHUSETTS. A few individuals made an effort to induce the Legislature of the old Bay State, at its late session, to abolish the Board of Education, discontinue the Normal Schools, and all other agencies now accomplishing so much for the cause of popular education. A man, or set of men, might as well undertake to prevent the sun's shining as to convince the people of Massachusetts that they would be better off without these educational agencies. That our readers may know what formidable opponents the friends of improvement have, we give the following extracts from written communications sent to the Legislative Committee. We give them without the slightest alteration.

The first declares that the petitioners want

"All our children in mass from 15 years old & under to have an equal chance in education & to do this I would recommend a law that such schools shall be maintained at least seven months in the year, and that their Prudential committees shall employ good & efficient teachers to teach the most advanced under fifteen years old & older if the district determine & that all cases of trouble with the teacher shall be settled by a majority of those present at a legally called meeting provided it cannot be amicably settled by the Prudential committee and that it shall be the duty of the Prudential Committee to canvass the district at the commencement of each term of the school, & if any children who are compus mentus are deprived of school for want of food or raiment, he shall forthwith supply them with such things as he may judge necessary at the expense of the town and that he shall see and that the prudential committee shall receive such compensation as the district shall determine & now I

ask you mr chairman to see that such laws are passed as is necessary to carry out this sistem"

He further says that

"All parties want to see education thrive in massachus what will become of those orphans such as our Honerable secretary pict up down to Salem without something bearing resemblance to what I have been saying, why not take care of these things by the school districts it is much cheaper" &c. "it seems to me this will raise the lower end & bring them all into a solid phalanks to march onward & upword to gether & not have them scattered from dan to basheba. it seems to me this will not only be the best way but the ceapest way, for I know something about the value of money as means to ends & this is another reason why I ask you to divide the Fund" &c. He further demanded "the abolition of the Board of Education, who are prodigating the people's money, & sticking their hands into the money up to their elbows. till their eyes stick out with fat;" he demanded it "in the name of the Great Jehovah and the Continental Congress," who for their blessed deeds (as he said in another place) "have been judged worthy to enter their fathers house not made with hands and eternal in the heavens & that to day are ranging those bright elysium fields that surround their father mansion-"

Another document, presented by another party, proceeds as follows:

To the Comite on Education;

The Freeschool party call for the disolution of the Board of Education so far as its conexion with the government so as to leave it on the same footing as Colleeges Accadimays & Other self sustaining institution of Learning by Subscription or Petitions with direct appropriations from the Government the same right belonging to the common schools.

the first incroachment noticed was a Law to to compell the Towns & Cityes to establish high Schools under a heavy penalty for non-compleasance an Act entirely inconsistent with the locality of the Rural Districts centralizing all the advantages in the central part of the Town where those most needing the benifit was least likely to get it."——"In the next place it semes to be necery to have another tax upon the right of the inhabitants of the state especially upon the Rural districts & towns by passing an Ac to copell Towns & Citys to chuze a number of Town Comitymen with a large fine for noncompliance tha has full power to pulddown Schoolhouses & build new

ones accoding to their will or better judgment in accordance with the act past at the Anuel Session in the Session of the Legislature off 1859 this Town Comite sems to be well adapte to carying out the purpurs of centraliseation of the power in a few mes hans to spread Normal School Teachers over the State to the disadvantage of our Children who have got their education from other institutions of Learning.—

in regard to the School Fund we ask for a equal dtribution among the Citys & Towns according to the number of Scholars & to be kept as a permant fund for the Comon schools as appropriate & no parte of it diverted to no other parparse."

Verily, where is the schoolmaster?

Ohio. From a letter received from Mr. Dwight C. Kilbourn, formerly of this State, who has been teaching in Ohio for the last two years, we make the following extracts:

"The schools are free to all whites, and ample provision is made for the colored population. The schools are supported by tax upon property, and the amount is divided equally amongst all under twenty-one. Many counties pay much more than they receive, and a strong effort is now being made to divide the fund that each county pays in that county. The last Superintendent's report returns 600,000 children and \$2,000,000 disbursed, giving about \$3.00 to each child. A place numbering about 500 inhabitants can become a special district and levy additional tax.

"The school system of Ohio works very well, and generally a good education can be obtained by all, as good teachers can be supported. The influence of our best teachers is felt by all. The most influential I would consider are, Barney, of Cincinnati; Lord, of Columbus; Cowdrey, of Cleveland; Holbrook, author of the Normal, of Lebanon, and Andrews, of Marietta College. But amidst all these manifold blessings for which we are duly thankful, there is, it must be owned, a deplorable amount of poor teaching, and a host of ignorant children. The prevailing trouble in teaching is the apathy or lack of interest in teachers in their own affairs. Three successive attempts to establish a Teacher's Society in Hamilton county, which includes the Queen City with its three hundred Teachers, have been three successive failures. There are but a very few Associations of Teachers in the State. The influence of a good free Normal School, like the one at New Britain, would do much in improving the standard of teaching

throughout the State. There are several private Normal Schools, that help the ship along. There are also a host of Academies, sometimes called Colleges, that send out a yearly roll of Lawyers, Doctors, Ministers, and lastly, a few poor Teachers."

BBOOKLYN. We are pleased to learn that our good friend, J. W. Bulkley, Esq., has been unanimously re-elected Superintendent of the schools of Brooklyn. This is Mr. Bulkley's sixth term of service, and his well-directed and indefatigable labors have resulted in great good to the schools of the city.

HARTFORD. We recently spent a short time in the schools of Messrs. Morse and Barrows in this city, and were much pleased with the general appearance of the same.

C. C. Kimball. The pupils of the Webster School, New Haven, presented Mr. Kimball, their late Principal, with an elegant edition of Irving's works,—thus manifesting their attachment to him, and appreciation of his services. We learn that Mr. Homer B. Sprague, late of Worcester, Mass., is to take charge of the Webster School during the summer and hopes are entertained that Mr. Kimball may regain his health sufficiently to resume his position in the autumn. We sincerely hope such may be the case.

STATE TEACHERS' ASSOCIATION. The next annual meeting of our State Association is to be held in New Haven on the 24th and 25th of May. We did hope to give the regular programme of exercises. We can only say that lectures may be be expected from E. L. Hart, A. M., of Farmington; W. F. Phelps, Esq., of Trenton Normal School; D. C. Gilman, Esq., of New Haven, and others. Circulars will be duly issued by the Secretary.

GIVE CREDIT. We frequently see articles originally written for our Journal, copied into other Journals without any acknowledgement of their origin. In the "Southern Teacher" we find an article, without credit, which first appeared as editorial in our Journal. The same article, "The two Candidates," was copied into the North Carolina Journal of Education without any definite acknowledgment, and also into several newspapers. Our article entitled "Working Teachers," was prepared by a young lady for our January number. The same article appears in the North Carolina Journal for March, credited to "Maine Teacher." These errors are, of course, unintentional, and we name them simply to secure more care in these particulars.

BARTON'S GRAMMARS. We would call the special attention of

our readers to these books advertised by Gould & Lincoln of Boston. We are much pleased with the books and commend them to teachers and committees. They are beautifully printed, and in this respect are a model for school books.

Messrs. Gould & Lincoln publish a large number of excellent books for teachers and for school libraries. Among the latter we would particularly commend the Aimwell stories, in six volumes.

SEWING MACHINES. On the second page of our cover will be found an advertisement of the celebrated Grover & Baker Sewing Machine, and we take great pleasure in commending this machine to any about to purchase. We can testify from actual observation. Our better half has had one in use about two months, and in all respects it far exceeds her most sanguine expectations. She learnt to use it without any aid, and has not, thus far, found the least difficulty in its operation. It is, indeed, a wonderfully perfect machine, and by its aid a tedious, slow and monotonous style of work is turned into amusement. It is no longer "stitch—stitch—stitch,"—but a pleasant w-h-i-z and a hum, and in an incredible space of time a piece of cloth is made to assume forms of use. Reader, if you wish to purchase a Sewing Machine, you may be sure that Grover & Baker's is an excellent one.

CAUSE OF THE AURORA BOREALIS.—M. de la Rive, the celebrated French astronomer, explains the production of the Aurora Borealis in the following manner:

"When the sun, having passed into the Southern hemisphere, no longer heats our atmosphere, the aqueous vapors which have accumulated during the summer in this part of the atmosphere begin to condense, the kind of humid cap enveloping the polar regions extends more and more, and facilitates the passage of electricity accumulated in the upper portion of the air. But in this elevated region, and especially at this period of the year, the aqueous vapors must most frequently pass into the state of minute particles of ice or snow floating in the air, similar to those which give rise to the halos; they form, as it were, semi-transparent mist. These half-frozen fogs conduct the electricity to the surface of the earth, near the pole, and are at the same time illuminated by these currents of electric discharges. In fact, all observers agree in asserting that the Aurora Borealis is constantly preceded by a mist, which rises from the pole, and the margin of which, less dense than the remainder, is colored the first; and indeed, it is very frequent near the pole in the winter months, and especially in those places where there is an abundance of vapor in the air.

#### DYING WORDS OF NOTED MEN.

"While you are in health and strength labor to do good, and to avoid evil, if you ever wish to escape the distress that oppresses me."

Sir John Hawkins.

"Be good, be virtuous, my lord. You must come to this."—Lord Littleton.

"See in what peace a Christian can die."-Addison.

"So you will keep peace within, which will be a comfort in the day of trouble."—William Penn's Father.

"I have lived long enough."-Locke.

"It is a sharp medicine, but a sure remedy for all woes."—"So the heart be right, it is no matter which way the head lies."—Sir Walter Raleigh.

"Be of good cheer, and pray the more, Master Ridley. We shall this day light such a candle in England, as I hope by God's grace shall never be put out."—Latimer.

"I am grateful to divine mercy for having left me sufficient recollection to feel how consoling prayer is to the dying."—M. de La Harpe.

"Had I served my God as diligently as I have served the king, he would not have forsaken me in my gray hairs."—Cardinal Wolsey.

"God bestows talents on our youth. Do see that they use them right."—Melancthon.

"Give Dayroles a chair."-Lord Chesterfield.

"God preserve the Emperor."—Haydn.

"The artery ceases to beat."—Haller.

"Let the light enter." - Goethe.

"All my possessions for a moment of time." — Queen Elizabeth.

" Be serious." - Grotius.

"What! is there no bribing of death?"—Cardinal Beaufort.

"I have loved my God, my father and liberty."-Madame de Stael.

"Into thy hands, O lord."-Tasso.

"It is small, very small indeed," (clasping her neck.)—Anne Boleyn.

"I pray you see me safe up, as for my coming down, let me struggle for myself," (ascending the scaffold.)—Sir Thomas Moore.

"Don't let that awkward squad fire over my head."-Burns.

"I feel as if I were myself again."-Sir Walter Scott.

"I resign my soul to God, and my daughter to my country."

Thomas Jefferson.

- "It is well."- Washington.
- "Independence forever."-Adams.
- "This is the last of earth."-J. Q. Adams.
- "I wish you to understand the true principles of Government. I wish them carried out. I ask no more."—Harrison.
  - "I have endeavored to do my duty."- General Taylor.
- "There is not a drop of blood on my hands."—Frederick V. of Denmark.
- "You spoke of refreshments, my Emilia. Take my last notes; sit down at my piano here, sing them with the hymn of your sainted mother. Let me hear once more those notes which have been my solace and my delight."—Mozart.
  - "A dying man can do nothing easy."-Franklin.
  - "Let not poor Nelly starve." Charles II.
  - "Let me die to the sound of delicious music."-Mirabeau.
  - "I expected him but not so soon."-C. G. Atherton.
  - "I still live."- Webster.

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